IN THE SPECIFICATION

Please replace the paragraph beginning on page 7, line 8 to page 8, line 5 with the amended replacement paragraph as follows:

The system and method achieves the general objective of locating best-performing content servers by periodically performing a clustering/mapping operation in real time at a redirection server. The clustering/mapping operation first performs a clustering operation which creates client clusters (i.e. groups of clients having similar network distance properties), the client clusters are then input to a mapping operation which maps or associates the client clusters with best-performing content servers in the network. The clustering operation generally includes the steps of periodically collecting at the redirection server, load and distance information from each content server in the network and using the collected distance and load information to partition clients into groups or clusters according to <u>Classless Inter-Domain Routing (CIDR)</u> address prefix similarity. Upon completing the clustering operation, the created client clusters are then provided as input to a mapping operation which maps or associates the client clusters to best-performing content servers in the network. A content server is considered to be best-performing with respect to a client cluster by having low round trip time in response to content requests from clients located within the client cluster. The mapping operation further assigns a selection probability to each identified best-performing content server such that the assigned probability ensures that the content server will be selected in a manner which will not exceed the content server's maximum service (i.e., load) capacity.

Please replace the paragraph beginning on page 9, line 17 to page 10, line 2 with the amended replacement paragraph as follows:

Referring now to the drawings, in which like reference numerals identify similar or identical elements. FIG. 1 is a block diagram of a public network system 50 according to an embodiment of the present invention. The public network system 50 is a high-speed, high bandwidth interactive distribution network. For illustrative purposes, public

network system 50 is the Internet, an intranet, an extranet or any other known network. Local DN server [[54]] 58 is one of a plurality of servers which are accessible by clients, one of which is illustrated by client 52. The public network system 50 further includes a plurality of redirection servers, one of which is illustrated by redirection server 56.

Please replace the paragraph beginning on page 10, lines 3-7 with the amended replacement paragraph as follows:

It is assumed that clients make domain name (DNS) requests to local DN servers. FIG. 1 shows a local DN server [[54]] 58 receiving a DNS request from a client 52. The local DN server [[54]] 58 is shown forwarding the client request to a redirection server 56. The redirection server 56 responds to the client request by returning to the client 52 the IP address of a content server 54a-e in the network determined to be a preferred content server.

Please replace the paragraph beginning on page 10, lines 13-16 with the amended replacement paragraph as follows:

The system of the present invention for identifying a preferred content server in response to a client DN request includes software resident exclusively in the memory of the redirection server 56, referred to herein as clustering/mapping software 57, and software resident in the memory of each content server 54a-e in the network, referred to herein as monitoring software 59.

Please replace the paragraph beginning on page 12, lines 13-15 with the amended replacement paragraph as follows:

where Timestamp is the time at which the network distance measurement was made, cache content service (i.e., cache) ID identifies the particular content server making the measurement, and client IP address identifies the particular client accessing the content server.

Please replace the paragraph beginning on page 20, lines 11-20 with the amended replacement paragraph as follows:

To perform the clustering operation using a binary tree structure such as the one illustrated in FIG. 3, the clustering/mapping software first sorts the distance and load tuple information collected in the present discrete time interval into groupings according to the supplied client's IP address. For each grouping the three summarized data values (See Eqs. 3-5) are computed. That is, the sum of pre-filtered network distances, the sum of the squares of prefiltered network distances, and the total number of received tubles is computed and stored at each of the respective leaf nodes 25a-j of the binary tree, where each leaf node 25a-j represents a particular IP address grouping. FIG. 2 illustrates the three Three stored values for representative node 25a are shown in FIG. 3. Similar summarized values are stored at each of the respective leaf nodes (i.e., nodes [[25a-j]] 25b-j)

Please delete the paragraph beginning on page 22, lines 9-11 associated with Table III.b.

Please replace the paragraph beginning on page 22, line 12 with the amended replacement paragraph as follows:
[[Table III.c]] Table III.b

Please replace the paragraph beginning on page 22, line 16 with the amended replacement paragraph as follows:
[[Table III.d]] Table III.c

Please replace the paragraph beginning on page 23, line 1 with the amended replacement paragraph as follows:
[[Table III.e]] Table III.d

Please replace the paragraph beginning on page 23, line 10 to page 24, line 5 with the amended replacement paragraph as follows:

Each of Tables [[IIIa-e]] IIIa-d has similar 24 bit IP addresses. Each table represents a client cluster for which the three summarized data values (Eqs. 3-5) will be computed and stored at a corresponding leaf node of the binary data tree. It is further noted that the three summarized data values are computed for each content server in the client cluster. For example, referring to the client cluster represented by Table [[III.e]] III.d, three summarized data values will be independently computed for content servers 2, 3 and 4 totaling nine separately computed values.